



## Kaloko-Honokōhau NHP

### Natural History and Resources:

Kaloko-Honokōhau National Historical Park (KAHO) boasts a wealth of natural and cultural resources. Outstanding features of this park include two ancient fishponds, Kaloko and 'Aimakapa, constructed and managed by Hawaiians to provide a consistent fisheries food supply. The U.S. Fish and Wildlife Service has also recognized 'Aimakapa Fishpond as significant habitat for endangered waterbird populations on the Kona Coast. Additionally, KAHO contains more than 100 anchialine pools (in-shore brackish water ponds) supporting endemic flora and fauna. Other natural resources at KAHO include coral reefs, coastal dryland forest, and bare lava fields. Endangered and threatened species include: the Hawaiian stilt, Hawaiian coot, hawksbill and green sea turtles, Hawaiian monk seal, migrating humpback whales, several plants, several anchialine pool shrimp species, and the orangeblack damselfly.

**Cultural History and Resources:** In addition to the fishponds, more than 250 archaeological sites have been documented in the park. These include hundreds of petroglyphs, habitation structures, dryland agriculture features, shrines, temples, trails, a salt pan, and a hōlua (stone slide).

Cultural history is emphasized at KAHO which centers on traditional fishing activities and includes fishpond management which formed the basis of the Hawaiian subsistence economy. Anchialine pools are also important culturally, as they were a significant water source for drinking water and were divided into different functions such as bathing and washing. The openness and natural surroundings of Kaloko-Honokōhau, as well as its numerous archaeological sites and the wealth of Hawaiian lore from the area's cultural heritage, make KAHO an ideal setting for demonstrating, teaching, and learning what is truly Hawaiian.

### Inventory and Monitoring Highlights:

In 1996, 116 vascular plant species and 25 bird species, including two endangered waterbirds, were observed at KAHO. An inventory of the insect fauna in 1992 found relatively few native

terrestrial arthropods. The Hawaiian hoary bat has also been surveyed within the park. In addition, a herpetological inventory conducted in 2004 yielded 7 species (with 2 additional species likely found in the park). In 1990, 150 marine fish species were documented and additional inventories are planned for corals, fish, algae, and other invertebrates.

Wetland bird populations are monitored at 'Aimakapa fishpond via an agreement with Ducks Unlimited. Furthermore, populations of damselflies breeding in anchialine pools have been monitored for several years. The park has also conducted cooperative green sea turtle monitoring with NOAA since 1999. NPS and USGS collaborators began monitoring for recruitment of key coral reef invertebrates and fishes in 2003. In addition, groundwater quality, anchialine pools, and fishponds are being monitored by KAHO staff. Finally, low frequency anthropogenic sounds in the marine waters of KAHO were monitored from 2004 to 2005.

The reintroduction of native plants is recorded using GPS and monitored for success rates. Also, an automated weather system has been installed. In the future, monitoring at KAHO will include native bees and damselflies, freshwater flora and fauna, and coral reef health.

**Current Issues in Management:** Control of alien invasive species, protection of threatened, endangered and rare species, and managing potential impacts to water quality from neighboring developments are central to natural resource management at KAHO. The park's general management plan highlights preservation, restoration, and interpretation of traditional Hawaiian culture and values, and includes maintaining access to traditional fishing and gathering areas. Plans are underway for Kaloko Fishpond to incorporate traditional Hawaiian aquaculture practices following the restoration of the Kaloko kuapā (fishpond wall). Protection of the water quality and quantity supplying the fishpond is crucial to its successful restoration. Native coastal dryland forest plant communities are being restored in several locations in the park.

### Come visit us:

Kaloko-Honokōhau NHP is located three miles north of Kailua-Kona on the west coast of Hawai'i Island. The park is 1,160 acres in size, including 596 acres of marine waters. Kaloko-Honokōhau is located on a combination of flat (pāhoehoe) and rough volcanic (a'a) deposits from Hualālai volcano, which last erupted in 1801.

KAHO Superintendant: Geri Bell

On the Web at: <http://www.nps.gov/kaho/>



The recently restored fish-wall protecting Koloko pond from the ocean.

Photo taken by Richard Gmirkin